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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,936	03/27/2001	Eiji Kawaguchi	1270-032	2971

7590 11/12/2004  
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EXAMINER

NAKHJAVAN, SHERVIN K

ART UNIT PAPER NUMBER

2621

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/819,936

Applicant(s)

KAWAGUCHI ET AL.

Examiner

Shervin Nakhjavan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 11, 13-16 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 7-10, 12 and 17-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 3-27-2000. It is noted, however, that applicant has not filed a certified copy of the Japanese application as required by 35 U.S.C. 119(b).

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: the brief description of Figure 6 in the specification does not include figures A-F. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 13, 14 and 21-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 13 and 21, the phrase "said bit-planes" and "said computer", respectively, are referring to a previously cited bit-plane and computer which does not appear in the claims. Therefore, these citations are confusing because, it is unclear what feature or element is further limited by this language. Claims 14, 22 and 23 variously depend from indefinite base claim and are thus themselves indefinite.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Koltai et al. (US 6,104,812).

Regarding claim 1, Koltai teaches printed matter comprising: a printable media having at least one surface (Figure 18, Item 1820 is a printable media); printing data disposed upon said at least one surface of said printable media (Column 11, Lines 52-54, wherein the data 1804 is the printing data); and information data embedded within said printing data and disposed upon said at least one surface of said printable media such that said information data is hidden within said printing data (Column 11, Lines 56-63, wherein the personal data 1822 is embedded and hidden within the image data 1804 and the combined image is the file 1814 to be printed);

Koltai teaches limitation of claim 2, said information-data comprises at least one portion of information data chosen from a group consisting of a legitimacy of the printed matter and an owner of the printed matter (Column 11, Lines 54-56, wherein the personal data 1820 is the legitimacy of the owner of the document);

Koltai teaches limitation of claim 3, the printing-data comprises image data and pattern data (Column 11, Lines 58-63, where the printing data includes the image 1804 and the personal data 1822 as text pattern).

7. Claims 4-6, 11, 15 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhao et al. (US 6,243,480).

Zhao teaches limitation of claim 4, an information hiding system (Column 7, Lines 40-41) for hiding information data (i.e. semantic digest being the information data Column 7, Line 39, where the semantic digest data can be hidden as a watermark, Column 8, Lines 12-13) within printing data disposed upon a printable media (i.e.

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semantic information 205 is a printed or faxed document, Column 7, Lines 1-4, or semantic information 305 id watermark embedding utility of figure 3), said system comprising: embedding means (Figure 4, item 413, wherein digest incorporating is the information embedding means) for embedding said information data (Figure 4, Item 411, semantic digest is the information data) within said printing data (Figure 4, Item 403 is the printing data since the output of the incorporator will eventually change into analog i.e. a printed form such as the generated printed form 203 Column 7, Lines 1-4); printing means (Figure 4, Item 415 is an analog produce which is a printer of document 203 above) for disposing said information data and said printing data upon said printable media to form a printed matter (Figure 4, item 203 which in our case Item 303 in Figure 3 would be the equivalent printed watermarked document); extracting means (Figure 5, Items 505) for reading said printed matter (the printed matter 503 is read by a scanner before extracting of watermark, Column 8, lines 24-27) and extracting said information data from said printing data (Item 505 is the extracting means of the semantic digest 515 which is the information data from the printed data 503 in figure 5); and outputting means for outputting said information data from said extracting means (the results of extracting of the watermark could be directed to a outputting means inherently for transmission to a bank for authentication Column 10, Lines 52-59);

Zhao teaches limitation of claim 5, said embedding means comprises an embedding computer upon which is stored an embedding algorithm (Column 8, Lines 14-15);

Zhao teaches limitation of claim 6, said embedding program means for embedding information-data by a steganographic technique (Column 7, Lines 22-23, wherein the adding of an invisible watermark to a document is a steganographic technique);

Zhao teaches limitation of claim 11, said extracting means comprises a scanner (Column 8, Lines 24-27) and an extracting computer comprising a monitor and upon which is stored an extracting program means (Column 12, Lines 12-21, wherein upon a request from a user, a digital representation comprising an active watermark is displayed to a user on a monitor inherently which the executing program is called upon when extracting is invoked by the user).

Zhao teaches the method of claim 15 corresponding to the system claim 4 since, the system claim is a means plus function wherein, function of claim 4 teaches the method steps of claim;

Zhao teaches limitation of claim 16, said embedding step comprises embedding said information-data by a steganographic technique (Column 7, Lines 22-23, wherein the adding of an invisible watermark to a document is a steganographic technique).

### ***Allowable Subject Matter***

8. Claims 7-10, 12 and 17-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record specifically Zhao et al. does not teach embedding program means performing the steps of claims 7

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and 17, extracting program performing the steps of claims 12 and 21, combined with other features and elements of the claims.

9. Claims 13, 14 and 21-23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Other prior art cited***

10. Prior art of record cited and not relied upon is considered pertinent to applicant's disclosure.

The US Patent Application 20040190750; US Patent 6,785,814; US Patent Application 20030210804; US Patent 6,591,009; US Patent 6,556,688; US Patent 6,263,086; US Patent 6,239,818; US Patent 6,104,812; US Patent 5,901,224; US Patent 5,734,752 and US Patent 5,686,725 variously teach hiding data within a printing data related to applicant's invention as claimed.

***Contact information***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shervin Nakhjavan whose telephone number is (703) 306-5916. The examiner can normally be reached on Monday through Friday from 8:00 am to 5:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Boudreau, can be reached at (703) 305-4706.

**Any response to this action should be mailed to:**

Assistant Commissioner for Patents  
Washington, DC 20231

**Or faxed to:**



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**(703) 872-9306** for **formal** communications, please mark "**EXPEDITED PROCEDURE**"

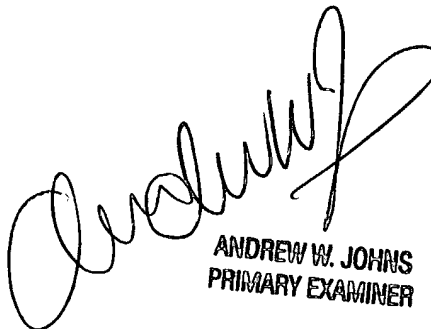
or:

for **informal** or **draft** communications; please label "**PROPOSED**" or "**DRAFT**".

**Hand delivered responses** should be brought to Crystal Park 2, 2121 Crystal drive, Arlington, VA, sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Tech center 2700 customer service office **(703) 306-0377**.

Shervin Nakhjavan *S.N*  
Patent Examiner  
Group Art Unit 2621  
November 9, 2004.

  
**ANDREW W. JOHNS**  
**PRIMARY EXAMINER**